will readily suggest themselves to those skilled in the art upon reading and understanding the detailed description of the invention. It is intended to include all such modifications and alterations insofar as they come within the scope of the present invention.~~;~~

~~Delete~~ the entirety of pages 13, 14, and 15; and,

Page 16, line 1, ~~delete~~ "Claims" and substitute therefor --We claim:--.

IN THE CLAIMS:

~~Please delete~~ claims 12 and 16.

~~Please amend~~ claims 1-11, 13-15, and 17-20, and ~~add new~~ claims 21-31 as follows:

1. (Amended) [Method] A method for the gasifying of organic containing substances [and] and/or substance mixtures in which

a) the organic containing substances and/or substance mixtures are fed into a pyrolysis reactor in which the organic containing substances and/or substance mixtures are kept in contact with a heat carrier medium whereby a rapid pyrolysis takes place in which the organic substances are reacted into pyrolysis products whereby the pyrolysis products consist of pyrolysis gases with condensable substances and a solid residue containing carbon,

b) the solid residue containing carbon and the heat carrier medium are fed to a firing in which the residue containing carbon is fired and the heat carrier medium heated and fed again to the pyrolysis reaction [(heat carrier medium cycle)],

c) the pyrolysis gases containing tar are reheated in a second reaction zone so that a gas product is obtained [with at] which has a high caloric value,

[**characterized in that**]

d) the pyrolysis is carried out in a moving bed reactor or a rotary drum,

e) [if necessary,] a reactant [such as steam] is mixed in with the pyrolysis gases [and then],

f) the reactant and pyrolysis gases are fed into an indirect heat exchanger in which the pyrolysis gases react with the reactant,

g) [the firing] waste gases produced from the firing are fed through [the] an indirect heat exchanger such that their heat content is utilized for the reaction of the pyrolysis gases with the reactant, and

h) [the] ash of the solid residue [containing] which contains carbon and the heat carrier medium [is] are removed from the firing and recycled into the pyrolysis reactor at the input end for the organic [material] substances and/or substance mixtures.

2. (Amended) [Method] The method according to [Claim] claim 1, [characterized in that] wherein the pyrolysis is carried out at a temperature of about 550-650°C.

3. (Amended) [Method] The method according to [Claims 1 and 2] claim 1, [characterized in that] wherein the reaction of the pyrolysis gases with [steam] the reactant is carried out at a temperature of about 900-1000°C.

4. (Amended) [Method] The method according to [Claims 1-3] claim 1, [characterized in that] wherein the reaction of the pyrolysis gases with [steam] said reactant is carried out in the presence of a catalyst.

5. (Amended) [Method] The method according to [Claim] claim 4, [characterized in that] wherein said catalyst includes a material selected from the group consisting of dolomite, calcite, nickel, nickel oxide, nickel aluminate, [or] nickel spinel [is used as a catalyst] and mixtures thereof.

6. (Amended) [Method] The method according to [Claim] claim 5, [characterized in that the catalysts are] wherein at least one of said catalyst is used simultaneously as the heat carrier medium [for the] in a heat carrier medium cycle.

A9 CONT'

7. (Amended) [Method] The method according to [Claims 1-6] claim 1, [characterized in that] wherein the hot pyrolysis gases are dedusted before the addition of [steam] said reactant.

8. (Amended) [Method] The method according to [Claims 1-7] claim 1, [characterized in that] wherein the at least one of said catalyst is fed to the hot pyrolysis gases in an entrained flow mode and is separated out after the reaction with [steam] said reactant, and then returned to the hot pyrolysis gases [in the cycle].

9. (Amended) [Method] The method according to [one or more of Claims 1-8] claim 1, [characterized in that] wherein the pyrolysis gases are dedusted and quenched after the reaction with [steam] said reactant.

10. (Amended) [Method] The method according to [one of Claims 1 -9] claim 1, [characterized in that] wherein a portion of the pyrolysis gas is fired and the produced heat is at least partially utilized for [the] a process selected from the group consisting of said pyrolysis [and/or], [the reaction with steam] said reaction of said pyrolysis gases with said reactant, and combinations thereof.

A9

11. (Amended) [Method] The method according to [one of Claims 1-10] claim 1, [characterized in that] wherein the solid residue [containing] which includes carbon and the heat carrier medium are fed to a grate firing.

END

13. (Amended) [Apparatus] The method according to [Claim 12] claim 1, [characterized in that] wherein the heat carrier medium [consists of] includes a fire-resistant [materials such as] material selected from the group consisting of sand, gravel, split, aluminum silicate, corundum, graywacke, quartzite, [or] cordierite, and mixtures thereof.

A10

14. [Apparatus] The method according to [Claim 12] claim 1, [characterized in that] wherein the heat carrier medium [consists of] includes molded bodies [composed of metallic or non-metallic substances such as steel or ceramic balls] consisting of metallic balls, non-metallic balls, and combinations thereof.

15. [Apparatus] The method according to [Claims 13 and 14] claim 13, [characterized in that] wherein the heat carrier medium has a grain size of about 1-40mm.

17. [Apparatus] The method according to [one or more of Claims 12-16] claim 1, [characterized in that] wherein the heat exchanger [(417) has] includes a catalyst filling.

A11 18. [Apparatus] The method according to [one or more of Claims 10-17] claim 17, [characterized in that] wherein the pipes of the heat exchanger [(417) consist of] include catalytically active material.

19. [Apparatus] The method according to [one or more of Claims 12-18] claim 17, [characterized in that] wherein the heat exchanger [(417)] is assigned to a solid bed reactor with catalyst feed.

20. [Apparatus] The method according to [one or more of Claims 12-19] claim 1, [characterized in that] wherein the heat exchanger [(417)] is first connected to a filter for dedusting.

Add the following new claims:

A12 21. An apparatus for gasifying organic containing substances and/or substance mixtures comprising a pyrolysis reactor having a firing for solid pyrolysis residue formed in the pyrolysis reactor, a reaction zone for the pyrolysis gases formed in the pyrolysis reactor, and a heat carrier medium that is recycled between the pyrolysis reaction and the firing, said pyrolysis reaction including a shaft kiln or a rotary drum that is equipped with a sluice for receiving said organic containing substances and/or substance mixtures and a sluice for the heat carrier medium, said firing

including a grate, said shaft kiln or rotary drum having a feed opening to allow materials to pass to the firing.

22. The apparatus according to claim 21, wherein waste gases are formed during said firing, said waste gases fed to a heat exchanger used to heat materials in said shaft kiln or rotary drum.

23. The apparatus according to claim 21, wherein said firing includes a discharge opening for said heat carrier medium to be discharged onto a discharge apparatus, said discharge apparatus selected from the group consisting of a worm, conveyor, and combinations thereof.

A12

24. The apparatus according to claim 21, wherein the heat carrier medium includes a fire-resistant material selected from the group consisting of sand, gravel, split, aluminum silicate, corundum, graywacke, quartzite, cordierite, and mixtures thereof.

25. The apparatus according to claim 21, wherein the heat carrier medium includes molded bodies selected from the group consisting of metallic substances, non-metallic substances, and mixtures thereof, said molded bodies including substantially spherical bodies.

26. The apparatus according to claim 24, wherein the heat carrier medium has a grain size of about 1-40mm.